	Application No.	Applicant(s)
Notice of Allowability		
	10/804,846 Examiner	MA ET AL. Art Unit
		Artonit
	Frank M. Lawrence	1724
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to the amendment filed August 21, 2006.		
2. X The allowed claim(s) is/are 1-36, 38, 39, 41, 45-48, 50, 51 and 55-57 (renumbered as 1-48).		
<ol> <li>Acknowledgment is made of a claim for foreign priority un a)</li></ol>	been received.  been received in Application No cuments have been received in this rece	national stage application from the complying with the requirements
INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached		
1) hereto or 2) to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. ☐ Notice of Informal Pa 6. ☐ Interview Summary of Paper No./Mail Date 7. ☐ Examiner's Amendm 8. ☒ Examiner's Statemen 9. ☐ Other	(PTO-413),
	o. <u> </u>	•

## **DETAILED ACTION**

## Allowable Subject Matter

- 1. Claims 1-36, 38, 39, 41, 45-48, 50, 51 and 55-57 are allowed.
- 2. The following is an examiner's statement of reasons for allowance: Reasons for allowance of claims 15-35 are given in the previous office action. The outstanding provisional double patenting rejection has been withdrawn because it is the only remaining rejection of claims 1-8, 12, 13 and 36-39, which are allowable because the prior art fails to disclose the arrangement wherein both the substrate and intermediate porous layers are metal, as defined in the specification, or wherein the first porous layer and solid layer are both made of a hydrogen permeable material. The closest prior art discloses ceramic or metal oxide intermediate layers. Independent claims 36, 47, 51 and 56 are also allowable because the prior art fails to suggest the arrangement including a first porous layer and solid layer both made of a hydrogen permeable material.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference to Oyama et al. (2003/0222015) discloses a layered hydrogen selective membrane.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Frank M. Lawrence Primary Examiner Art Unit 1724

trank faurence 9-20-06

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